



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



In reply refer to:
FWS/EC-05-038

Robert Schneider, Chairman
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, California 95670

Dear Mr. Schneider:

In April 2005, the Central Valley Regional Water Quality Control Board (RWQCB) received a letter from the Yolo County Board of Supervisors, commenting on the RWQCB's Total Maximum Daily Load (TMDL) for Mercury in Cache Creek, Bear Creek, and Harley Gulch. Attached to this letter was a report by Dr. Darrell Slotton, titled *Analysis of TMDL Mercury Criterion Calculations for Cache Creek Fish and Water*, in which the methodology and resulting water quality objectives of the RWQCB's TMDL were reviewed. Dr. Slotton drew several conclusions from his analysis of the TMDL's specific criterion calculations for fish tissue and water, essentially concluding that the water quality objectives for mercury in fish tissue and water presented in the RWQCB's recommended alternative were unnecessarily stringent. With regard to the TMDL's targets for the protection of wildlife, which are the basis of the recommended alternative and are the focus of our letter today, Dr. Slotton stated that problems were found in the calculations of protective mercury levels in the prey of bald eagles and peregrine falcons. In summary, Dr. Slotton concluded that "...the proposed fish criterion concentrations for the protection of human and wildlife health are substantially more restrictive than the intent of the EPA National Criterion for mercury."

As you may be aware, the U.S. Fish and Wildlife Service's (Service) Sacramento Fish and Wildlife Office was contracted by the U.S. Environmental Protection Agency (EPA) to evaluate its Clean Water Act Section 304(a) human health criterion for methylmercury, what Dr. Slotton calls the EPA National Criterion. You may also be aware that, as part of that same contract, the Service was tasked with evaluating the wildlife targets presented in the RWQCB's draft Cache Creek TMDL. For the human health criterion evaluation, a risk assessment methodology was developed by an interagency team of Service and EPA scientists. A further refined version of this methodology was used by the RWQCB to develop its draft TMDL wildlife targets, and then we used this refined methodology in our evaluation of those draft targets. Our evaluation provided revised wildlife targets, which were the basis of the RWQCB's currently proposed recommended alternative.

TAKE PRIDE
IN AMERICA

Robert Schneider, Chairman

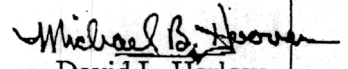
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The general methodology developed for the human health criterion evaluation has recently (April 2005) been independently peer reviewed for the EPA by four well respected mercury scientists. As part of the peer review charge, reviewers were also asked to consider the refinements made to the methodology for the Cache Creek TMDL. All four peer reviews were highly favorable, with some relatively minor concerns, both of the general methodology and the Cache Creek refinements.

We provide all this background as supporting information for our recommendation to retain the Cache Creek TMDL wildlife targets presented in the RWQCB's recommended alternative. We have reviewed both Dr. Slotton's analysis and the RWQCB staff response, and concluded that Dr. Slotton's analysis does not support changing the proposed wildlife targets. We do agree that application of the methodology would provide a more accurate risk assessment if sufficient monitoring were performed in the watershed to better characterize concentration relationships between aquatic trophic levels, between tissues of aquatic prey and terrestrial consumers, and to provide a more definitive dietary composition for the bald eagles foraging in the Cache Creek watershed. However, it is important to note that 'more accurate' does not necessarily equal 'less stringent.' Data gathered in an adequate monitoring plan could indicate that the appropriate wildlife targets may need to be higher or lower than what the RWQCB is currently proposing. Until such time as this monitoring can be conducted, we believe the information used by the RWQCB in its calculations is the most reliable and scientifically sound.

The RWQCB staff have done an excellent job with the Cache Creek TMDL, and the Service concurs with and supports the proposed wildlife targets. Should you have any questions about this letter, please contact either Tom Maurer or Daniel Russell of my staff at (916) 414-6590.

Sincerely,


David L. Harlow
Acting Field Supervisor

cc:

Diane Fleck, U.S. Environmental Protection Agency, San Francisco, CA
Janis Cooke, Central Valley Regional Water Quality Control Board, Rancho Cordova, CA